

LIKHACHEVA, T.V., inzh.; PRAVDYUK, A.D., inzh.; KUSTOV, A.P., inzh.;  
PAVLOVSKAYA, K.K., inzh.

Protective and ornamental chromium plating of small parts by pouring.  
Mashinostroenie no.4:77-81 J1-Ag '65.

(MIRA 18:8)

KUSTOV, A.Ye.; LISKIN, A.Z.; GLOBIN, A.G.

Dedusting industrial spaces and work areas. Metallurg 9 no.3:13-15  
Mr '64. (MIRA 17:3)

1. Bakal'skiy aglomeratsionnyy kombinat i Chelyabinskiy nauchno-  
issledovatel'skiy institut gornogo dela.

KUSTOV, F.V.

Colloidochemical processes in coking coal. Paliva 42 no.9:271-  
272 S '62.

DUMFE, Vitaliy Eduardovich; KUSTOV, G.D., red.; GOSTISHCHEVA, Ye.M.,  
tekhn. red.

[Electric-spark machining of metals]Elektroiskrovaia obrabotka  
metallov. Novosibirsk, Novosibirskoe knizhnoe izd-vo, 1962.  
53 p. (MIRA 15:11)

(Electric metal cutting)

TERSKIKH, Anatoliy Mikhaylovich; KUSTOV, G.D., red.

[Electronic devices] Elektronnye pribory. Novosibirsk,  
Novosibirskoe knizhnoe izd-vo, 1963. 166 p.

(MIRA 17:6)

1. Rukovoditel' laboratorii avtomatiki Novosibirskoy ob-  
lastnoy stantsii yunykh tekhnikov (for Terskikh).

KUSTOV, I., inzhener.

Unsolved problems of dust elimination in cement industries. Stroi.  
mat. 3 no.3:11-12 Mr '57. (MIRA 10:4)  
(Cement industries) (Dust collectors)

AGAFONOV, S.L.; ALEKSEYEVA, A.N.; BELLYUSTINA, L.N.; GOLOV, I.I.;  
GUSEV, O.V.; DMITRIYEVA, V.I.; YEVLANPIYEVA, F.A.;  
YELISEYEV, A.I.; ZHAVORONKOV, N.A.; ZHARKOV, S.A.;  
KIR'YANOV, I.A.; KRAYNOV, L.A.; KUSTOV, K.L.; LBOV, F.A.;  
LIPATOV, N.A.; LIPOVETSKIY, I.A.; MALYUGIN, V.N.; MARINOV,  
N.N.[deceased]; MIKHAYLOV, A.N.; POTAPOVA, Ye.D.;  
TRUKHMANOV, G.A.; UKHIN, V.A.; FILIPPOV, V.A.; CHEBURASHKIN,  
A.M.; SHKOTOV, A.T.; GARANIYA, L.F., kand. fil. nauk

[The city of Gorkiy; a guidebook] Gorod Gor'kii, Volgo-  
Viatskoe knizhnoe izd-vo, 1964. 374 p. (MIRA 17:12)

SOV/177-58-5-17/30

17(

AUTHOR: Kustov, L.A., Captain of the Medical Corps

TITLE: The Role of Hygienic Gymnastics in the Complex Treatment of Patients Suffering From Chronic Gastritis in Sanitaria of Health Resorts (Rol' lechebnoy gimnastiki v kompleksnom sanatorno-kurortnom lechenii bol'nykh khronicheskim gastritom)

PERIODICAL: Voenno-meditsinskiy zhurnal, 1958, Nr 5, pp 70 - 74 (USSR)

ABSTRACT: At the Yessentuk'skiy sanatoriy (Yessentuki Sanatorium) a set of physical exercises has been compiled for patients suffering from chronic gastritis with secretory insufficiency. Taking into consideration that chronic gastritis is frequently accompanied by a lowered tonus of the stomach, laxation of the motorial function of the gastrointestinal tract, and laxation of the entire organism, the physical exercises have been divided into three groups: 1) exer-

Card 1/2



SOV/177-58-5-17/30

The Role of Hygienic Gymnastics in the Complex Treatment of Patients Suffering From Chronic Gastritis in Sanitaria of Health Resorts

cises with a gymnastic stick; 2) exercises at the gymnastic wall; 3) exercises in bed. Good results were noted in all groups. There are 4 tables.

Card 1/2

KUSTOV, L. I.

Razvitie putevykh rabot na Volge. [The development of construction works on the Volga.]. Moskva, Rechizdat, 1947, 47 p., illus.

SO: SOVIET TRANSPORTATION AND COMMUNICATION, A BIBLIOGRAPHY, Library of Congress, Reference Department, Washington, 1952, Unclassified.

KUSTOV, L. I.

KUSTOV, L. I. "Dredging of the Volga and measures of its improvement." In the symposium: *Materialy tekhn. soveshchaniy po putevym robotam (M-vo rech. flota SSSR)*. Moscow, 1949, p. 126-128

SC: U-5240, 17Dec53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

VLADIMIROV, Nikolay Petrovich, inzh.; CHENTSOV, Konstantin  
Petrovich, inzh.; GOLOVUSHKIN, M.P., inzh., retsenzent;  
HELOGLAZOV, V.I., retsenzent; KUSTOV, L.I., prof., red.;  
MAKRUSHINA, A.N., red.izd-va; RIDNAYA, I.V., tekhn.red.

[General sailing directions for inland waterways] Obshchaya  
lotsiya vnutrennikh vodnykh putei. Moskva, Izd-vo "Rechnoi  
transport," 1963. 270 p. (MIRA 17:3)

GUREVICH, A.M., dots., kand. ekon. nauk; KUSTOV, L.I., prof.,  
otv. red.

[Water ways and transportation economy; lecture in the  
course on the "Economics of water transportation" for  
students of all specialities] Vodnye puti i putevye kho-  
ziaistvo; lekttsiia po kursu "Ekonomika vodnogo transporta"  
dlia studentov vsekh spetsial'nostei. Gor'kii, 1962. 21 p.  
(MIRA 17:12)

1. Gosrki. Institut inzhenerov vodnogo transporta. Kafedra  
ekonomiki i kommercheskoy ekspluatatsii.

CHEKRENEV, Aleksey Ivanovich; BRISHEIN, Kirill Vladimirovich;  
KULTOV, L.I., prof.; Tolstozemov, ZEMNOV, S.A., doc. sci.  
~~LECHNOV, T.A.~~, doc.; NAKHUSHINA, A.N., doc.

[Waterways] Vozhnye puti. Moskva, Transport, Pt. 1. 196...  
319 p. (LIRA 18:2)

PAKHOMOV, V.H., kand. tekhn. nauk; NAUMOV, A.I., inzh.; SHELMANOV, V.S., inzh.; KONSTANTINOV, V.P., inzh.; KOSTIN, A.M., inzh.; SEMENOV, YU.K., inzh.; PYATLIN, A.A., kapitan; VAGANOV, G.I., kand. tekhn. nauk; SVIRIDOV, A.A., inzh. KHODUNOV, M.Ye., kand. yurid. nauk; SAPOGOVA, A.Ye., inzh.; SOYUZOV, A.A., doktor tekhn. nauk, prof., red.; VASIL'YEV, A.V., kand. tekhn. nauk; ALEKSEYEV, V.I., red.; KUSTOV, L.I., red.; VITSINSKIY, V.V., red.; BORISOV, I.G., red.; SOLAREV, N.F., red.; ANDRIYENKO, V.I., red.; SUTYKIN, B.A., red.; GOLOVNIKOV, V.I., red.; ZOTOVA, V.V., red.

[Manual for the navigator of a river fleet] Spravochnik sudovoditelia rechnogo flota. Izd.2., dop. Moskva, Transport, 1965. 423 p. (MIRA 18:2)

1. Gor'kovskiy institut inzhenerov volnogo transporta (for Pakhomov, Semenov, Vaganov, Vasil'yev). 2. Moskovskiy rechnoy tekhnikum (for Naumov). 3. Volzhskoye ob'yedinennoye rechnoye parokhodstvo (for Shelmanov, Sapogova). 4. Ministerstvo rechnogo flota (for Konstantinov, Sviridov). 5. Kazanskiy port (for Kostin). 6. Moskovskoye rechnoye parokhodstvo (for Pyatlin).

ACC NR: AR6028510

(N)

SOURCE CODE: UR/0398/66/005/005/1006/1006

AUTHOR: Kustov, L. I.

TITLE: Basic terms and definitions for piloting on internal waterways

SOURCE: Ref. zh. Vodnyy transport, Abs. 5V3LK

REF SOURCE: Tr. Gor'kovsk. in-ta inzh. vodn. transp., vyp. 67, 1966, 35 str.

TOPIC TAGS: waterway engineering, hydraulic engineering, hydrology, meteorology, ship navigation, navigation aid, handbook

ABSTRACT: The book contains special terms required in piloting on rivers, canals, lakes and reservoirs, and includes a number of terms in the field of general hydrology, waterways, hydraulic engineering, meteorology, and other related disciplines. The book contains pictures and is planned for a wide circle of practical workers in the river fleet and for students in the departments in the MRF [Ministry of the River Fleet] institutes for water transportation engineers. [Translation of abstract]

SUB CODE: 17

Card 1/1

UDC: 034:627.9



YERPMENKO, L.T.; KOLESOV, Yu.R.; KUSTOVA, L.V.

Calorimetric unit for investigating the kinetics of rapid chemical reactions in aggressive media. Zhur. fiz. khim. 38 no.9:2323-2327 S '64. (MIRA 17:12)

1. Institut khimicheskoy fiziki AN SSSR.

*Kustov M.*

USSR/ Miscellaneous - Radio broadcasts

Card 1/1 Pub. 89 - 9/27

Authors : Kustov, M.

Title : To improve the radio broadcasting technique

Periodical : Radio 8, 17-18, Aug 1955

Abstract : The problems brought up in a letter by a reader of the periodical Radio pertain to further improvement of the radio broadcasting technique. The writer who represents a larger group of radio listeners appeals to the Ministry of Education and to the Ministry of Communications Industry for their scientific aid in improving the broadcasting technique.

Institution : .....

Submitted : .....

KUSTOV, N.D.

Specialization of the factories belonging to the Moscow Province  
Textile Industry trust. Tekst.prom. 16 no.6:59 Je '56. (MLRA 9:8)  
(Moscow Province--Textile industry)

KUSTOV, Nikolay Dmitriyevich; KUDRYAVTSEV, D.S., retsenzent; SHUSTOVA, I.B.,  
redaktor; DMITRIYEVA, N.I., tekhnicheskiiy redaktor

[Manufacturing terry cloth] Proizvodstvo makhrovyykh tkani. Moskva,  
Gos. nauchno-tekhn. izd-vo lit-ry po legkoi promyshl., 1957. 121 p.  
(Textile fabrics) (MIRA 10:11)

KUSTOV, N.D.

Mechanizing the production of satin comfort blankets, Tekst, prom.  
17 no.5:51-52 My '57. (MLBA 10:6)

1. Glavnyy inshener tresta "Mosobltekstil'prom".  
(Coverlets) (Textile machinery)

DENISOVA, N.N.; KUSTOV, N.D.

Utilization of internal potentialities in spinning. Tekst. prom.  
19 no.6:92-93 Je '59. (MIRA 12:9)  
(Spinning)

1. I. I. Goryunov

Using passport for mining engineering at Moscow. G. G. 4000.  
no. 2171 in '65. (1965)

1. Iul'ianskiy gornorudnyy kombinat, Magadan'skaya oblast'.

DEYCH, M. Ye., doktor tekhn. nauk, prof.; FILIPPOV, G. A., kand. tekhn. nauk;  
BARANOV, V. A., kand. tekhn. nauk; PRYAKHIN, V. V., inzh.; KUSTOV, O. P.,  
inzh.

Effect of humidity on the efficiency of a bandaged and nonbandaged  
turbine stage. Energomashinostroenie 10 no. 8:21-26 Ag '64.  
(MIRA 17:11)



1. Title, author, topic, date: ...

Effect of the height and speed of the water level on the efficiency of a turbine stage of a steam turbine.

Teploenergetika 11 no.2:77-84, 1965.

(SIPA 18:6)

1. Moskovskiy energeticheskiy institut.

31(5)

PHASE I BOOK EXPLOITATION

SOV/1635

Kustov, Pavel Andreyevich

Ispytaniya sudovykh parosilovykh turbinnykh ustanovok (Testing Marine Steam Turbine Power Plants) Leningrad, Sudpromgiz, 1958. 227 p. 4,000 copies printed.

Ed.: Ye.N. Shaurak; Scientific Ed.: A.F. Ivanov; Tech. Ed.: L.M. Shishkova.

PURPOSE: This book may be used as a manual by engineering and technical personnel during acceptance testing of steam-turbine power plants and the testing of ships to determine operational data.

COVERAGE: The book discusses preparation for and methods of testing marine steam-turbine power plants and methods for working-out the data obtained during tests. Brief theoretical information and formulas needed for tests are presented. Instruments for measuring and controlling progress during the

Card ~~1/4~~

Testing Marine Steam Turbine (Cont.)

SOV/1635

testing of marine steam-turbine power plants are described.  
No personalities are mentioned. There are 37 references, all Soviet.

TABLE OF CONTENTS:

From the Author	4
Ch. I. Preparations for Mooring Tests and Trial Trips	5
1. Function and tasks of acceptance agents	5
2. Organization of the acceptance test crew	7
3. Organization of the test team	9
4. Organization of the technical-services team	11
5. Organization of material and technical supply	14
Ch. II. Mooring Tests	
6. Purpose of mooring tests and procedure for carrying them out	16
7. Testing boiler units	19
8. Testing turbine units	53
9. Testing auxiliary mechanisms, piping and pipe systems	90

Card 2/4

1. FULTON, J.
2. NOSA (600)
4. Construction Industry - Finance
7. Return of sums in construction estimates, Fin. i kred. USSR No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

KUSTOV, S., upravlyayushchiy.

Mechanization of apartment house laundry rooms. Zhil.-kom.khoz. vol.3 no.9:  
23-24 S '57. (MLBA 6:9)

1. Domoupravleniye No.18 Kuybyshevskogo rayona Leningrada. (Laundry)

KUSTOV, S.

Against formalism and unnecessary operations in the control work  
of communal banks. Fin. SSSR 16 no.10:41-44 O '55. (MLRA 9:2)

1. Upravlyayushchiy Kiyevskim oblastnym kommunal'nym bankom.  
(Banks and banking)

KUSTOV, S.

Comments of the head of a district soviet budget commission. Fin.  
SSSR 19 no.11:54-56 N '58. (MIRA 12:7)  
(Kiev-Budget)

KUSTOV, S.

Financing and issuing long-term credit for construction and  
capital repair. Den.1 kred. 18 no.2:64-65 Y '60. (MIRA 13:1)  
(Kiev--Construction industry--Finance)



KUSTOV, S.; GNEDIN, I.; VEDERNIKOV, K.

Use funds for capital repairs more efficiently. Den. 1 kred.  
18 no.12:47-51 D'60. (MIRA 13:11)

1. Zamestitel' upravlyayushchego Kiyevskoy oblastnoy kontoroy  
Gosbanka. (for Kustov). 2. Rukovoditel' kreditnoy gruppy Ikryaninskogo  
otdeleniya Gosbanka Astrakhanskoy oblasti (for Gnedin). 3.  
Nachal'nik proizvodstvenno-ekspluatatsionnogo otdela Gomel'skoy  
kontory Gosbanka (for Vedernikov).  
(Banks and banking) (Construction industry--Finance)

KUSTOV, S.

Karavaevo is under construction. Sel'. stroi. 16 no.12:5-6 D '61.  
(MIRA 15:2)

1. Prorektor sel'skokhozyaystvennogo instituta "Karavayevo."  
(Kostroma Province--Construction industry)

KUSTOV, V.; UL'ZUTUYEV, A.; ULIN, I.I., red.; LEVINA, L.G., tekhn. red.

[Khanda Batomunkueva, a collective farm shepherd] Khanda Batomunkueva.— kol'khoznyi chaban. Moskva, Izd-vo M-va sel'.khoz. RSFSR, 1960. 23 p. (MIRA 14:9)  
(Aga Buryat National Area—Sheep)

PROCESS AND PROPERTIES INDEX

21

*ca*

**Viscosity of mazut coal suspensions** A. I. Kustov and L. I. Khoduntsev, Disperse Fuel Lab., Energetika Inst., Acad. Sci. U.S.S.R., *Ibid.*, Nauk. S.S.S.R., 1961, Tekhn. Nauk, Inst. Mashinostroyeniya, Sveshchikova, Vyssh. Zhukovskiy, Kollod. Rastvor., Conf. on Viscosity of Liquids and Colloidal Solutions, 1, 105-113 (1961). Samples included suspensions in commercial mazuts of charcoal, grain size 45 and 150  $\mu$ , solid phase content 10%, 15%, and 20%, and of coal powder, grain size 44, 74, and 100  $\mu$ , (resp., 32%, 20%, and 150 mesh), solid content 20%, 30%, 40%, and 50%. Measurements were made in a horizontal capillary viscometer, between two 100 cc. reservoirs, under pressures up to 100 cm. Hg. Level readings by 1 to be made with the aid of a spherical cork float (diam. 27 mm), carrying a steel ring, length of capillary 100 cm., diam. 0.8, 0.4 cm. Laminarity of the flow was confirmed.

From plots of the viscosity  $\eta$  against the pressure it was ascertained that the limiting shearing stress is practically zero and can be disregarded. With 40% coal suspensions,  $\eta$  drops sharply with rising temp., from 20° to 80°, where the curves for various samples seem to converge. The shape of the  $\eta$ -temp. curves is determined primarily by that of the oil used. Charcoal suspensions show, below 80°, higher  $\eta$  than suspensions of coal of equal content (20%). This is ascribed to higher adsorption capacity and resulting immobilization of larger amts. of the liquid medium. The effect of this factor diminishes with rising temp. and disappears at about 80°. For both coal and charcoal suspensions,  $\eta$  rises sharply with increasing content of solid phase, e.g., coal 20%, 30%, 40%,  $\eta$  = resp., 4, 6.9, 10.8 poises, at 40°. At ordinary temp. the suspensions lose their fluidity at about 50% solid phase. The effect of grain size is slight, e.g., 20% charcoal suspension at 40°, grains, resp., 44, 74, 100  $\mu$ ,  $\eta$  = resp., 8.34, 8.90, 8.90 poises. Results obtained in glass and in steel tubes do not differ materially; hence the slippage effect is small, particularly above 50%. Homogenization of the suspensions by repeated passing through a colloidal mill, without change of grain size, results in markedly lower  $\eta$ . This is due only to a higher degree of homogeneity, not to higher dispersity.

N. Thon

METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

CLASSIFY ON: 000 001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062 063 064 065 066 067 068 069 070 071 072 073 074 075 076 077 078 079 080 081 082 083 084 085 086 087 088 089 090 091 092 093 094 095 096 097 098 099 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

CA 9

PROCESSES AND PROPERTIES

The use of coal-mazut mixture in thirty ton open hearth furnaces. V. P. Kustov. *Bull. Acad. Sci. USSR, Div. Tech. Sci.* 1941, No. 4, 67-70. Coal-mazut mixts. (coal powder 30 wt. % + mazut 70 wt. %) can be used instead of mazut contg. no S in both the open-hearth and the blast furnace in ferrous and nonferrous metallurgy. The cost of fuel decreases by 14.5%, the time of smelting decreases slightly, the temp. regulation is the same, no effect on the quality of the metals is observed and the slag has had no effect on the performance of the furnace. The mixt. possesses a greater heating value (by 53.9%) than mazut and its sp. gr. is greater. The mixt. can be pumped through pipes without clogging them with dust. W. R. Henn

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

ROMANOVICH, V. N., KUSTOV, V.F.

"Combustion of a Mixture of Sulfite Alkali with Coal Dust," Izv. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 6, 1941. Submitted 21 Dec 1940.

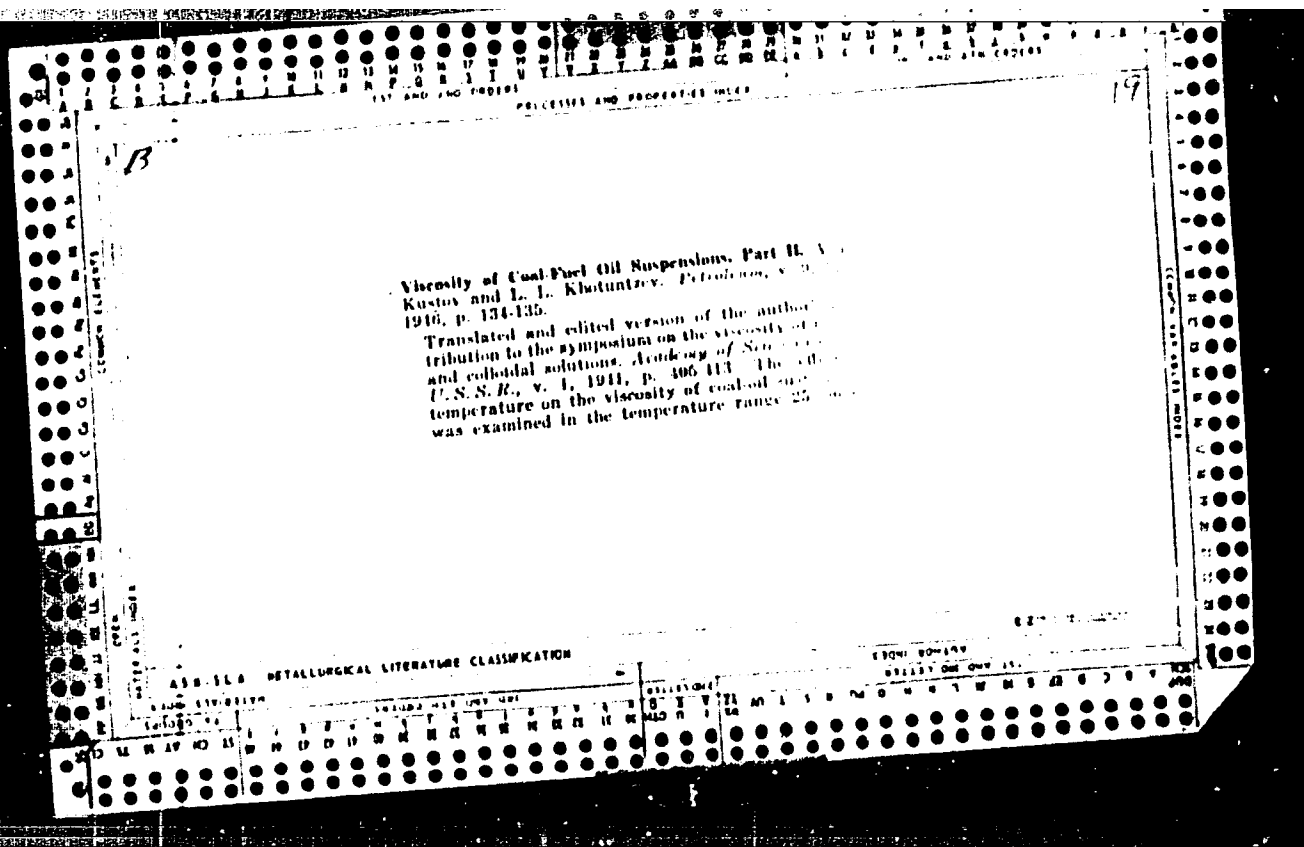
Report U-1530, 25 Oct 1951

KUSTOV, V. F.

Colloidal fuel.

Moskva, 1942. 182 p. (49-31041)

TP360.K8





*Kustov, V.F.* 68-8-6/23  
AUTHOR: Kustov, V.F., Doctor of Technical Sciences.

TITLE: Coking of Coals as a Colloido-Chemical Process.  
(Koksovaniye ugley kak kolloidnokhimicheskiy protsess).

PERIODICAL: Koks i Khimiya, 1957, No.8, pp.18-20 (USSR)

ABSTRACT: Coking of coal is considered as a colloido-chemical process taking place in the following stages: 1) up to about 300° C the removal of volatile substances from coal (H<sub>2</sub>O, CO<sub>2</sub>, CO, light hydrocarbons); 2) the formation of a dispersion medium (up to 450° C); 3) the adsorption of the dispersion medium by macro-molecular compounds of coal and swelling of gel; 4) the cracking of the colloidal gel and its syneresis and 5) the formation of a xerogel and its pyrolysis with the formation of coke. There are 4 references including 3 Slavic.

ASSOCIATION: Leningrad Technological Institute im. Lenolet. (Leningradskiy Tekhnologicheskii Institut im. Lensovet).

AVAILABLE: Library of Congress  
Card 1/1

Kustov V.F.

AUTHOR: Kustov, V.F., Professor

26-58-24/56

TITLE: Water-Fuel Suspensions (Vodnotoplivnyye suspenzii)

PERIODICAL: Priroda, 1958, <sup>47-</sup>Nr 6, p 91-92 (USSR)

ABSTRACT: The article deals with the combustion (to gases for utilization in the chemical industry) of suspensions and emulsions consisting of water with solid or liquid fuel particles suspended in it. The Institut goryuchikh iskopayemykh AN SSSR (Institute of Combustible Minerals, AS USSR) has been conducting extensive research on emulsions containing resins or mazut with large quantities of water. For such emulsions, which have to be completely homogeneous, a Khotuntsev-Pushkin disperser was used. Such emulsions can be burnt in furnaces as well as in combustion motors. The author points out the prospects of burning water-fuel suspensions to eliminate waste waters. Sulfite liquor, for example, originating from cellulose mills, can be easily burnt when sufficient coal dust is added. Numerous examples are mentioned, covering similar experiments recently made in foreign countries.

ASSOCIATION: Leningradskiy tekhnologicheskii institut imeni Lensovet  
(Leningrad Institute of Technology imeni Lensovet)

Card 1/1 1. Emulsions-Properties 2. Water fuel-Suspensions

KUSTOV, V.F.

Coal carbonization as a colloidal and chemical process. Trudy  
LTI no.51:5-9 '59. (MIRA 13:8)

(Coal--Carbonization)  
(Fuel, Colloidal)

KUSTOV, V.F.

Water fuel suspensions. Trudy LTI no.51:10-13 '59.  
(MIRA 13:8)

(Sewage disposal)  
(Combustion)

KUSTOV, V.F., KOKURIN, A.D., VISENKO, M.I.

Production of synthesis gas from water fuel suspensions. Trudy  
LTI no.51:14-18 '59. (MIRA 13:8)  
(Coal gasification)

KUSTOV, V.F.

Theory of scale formation as a result of an incomplete combustion of fuels, and the use of antiscaling powders. Trudy LTI  
no.51:19-25 '59. (MIRA 13:8)  
(Coal gasification)

SHILKIN, P.M.; ZEL'VYANSKIY, Ya.A.; SIBAROV, Yu.G.; KUSTOV, V.M.;  
TSYKHMAN, A.I.; KUVSHINOV, M.I.; SHIPAREV, Yu.A.; TYURNIN,  
G.A.; AVSTREYKH, L.D.; BAKANOV, N.N.; KHITROV, P.A., tekhn.  
red.

[Safety engineering regulations for operating the contact  
networks of d.c. electrified railroads]Pravila tekhniki bez-  
opasnosti pri ekspluatatsii kontaktnoi seti postoiannogo to-  
ka elektrifitsirovannykh zheleznnykh dorog. Moskva, 1962.  
128 p. (MIRA 15:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye elektrifi-  
katsii i energeticheskogo khozyaystva. 2. Zamestitel' na-  
chal'nika tekhnicheskogo otdela TsE Ministerstva putey  
soobshcheniya (for Shilkin). 3. Tekhnicheskii otdel TsE Mi-  
nisterstva putey soobshcheniya (for Zel'vianskiy). 4. TSen-  
tral'nyy komitet profsoyuza rabochikh zheleznodorozhnogo  
transporta (for Sibarov). 5. Nauchno-tekhnicheskii sovet Mi-  
nisterstva putey soobshcheniya (for Kustov). 6. Sluzhba  
elektrifikatsii i energeticheskogo khozyaystva Odesskoy zhe-  
leznoy dorogi (for Tsykman). 7. ECh Yuzhno-Ural'skoy zeleznoy  
dorogi (for Kuvshinov). 8. ECh Moskovskoy zheleznoy dorogi  
(for Segala, Shiparev, Tyurnin). 9. EChK Oktyabr'skoy zhelez-  
noy dorogi (for Avstreykh). EChK Moskovskoy zheleznoy dorogi  
(for Bakanov). (Electric railroads—Safety regulations)

KUSTOV, V.M., inzh.; TIMOFEYEV, V.P., inzh.

Electric lines along the trackside for power supply to track  
mechanisms. Put' i put.khoz. 6 no.3:6-9 Mr '62. (MIRA 15:3)  
(Railroads---Electric equipment)



KHLOPKOV, M.V., inzh.; KUSTOV, V.M., inzh.

Control of the icing of the overhead contact system.  
Zhel.dor.transp. 46 no.12:66-70 D '64.

(MIRA 19:1)

PRUSAKOV, M.B., inzh.; KUSTOV, V.M., inzh.; BARANOV, L.A., inzh.;  
LUK'YANOV, S.I., inzh.; PROLOV, V.S., inzh., retsenzent;  
USENKO, L.A., tekhn. red.

[Operation and repair of the equipment of d.c. traction  
substations] [kspluatatsiia i remont oborudovaniia tiago-  
vykh podstantsii postoiannogo toka. [By] M.B. Prusakov i dr.  
Moskva, Transzheldorizdat, 1963. 211 p. (MIRA 16:5)  
(Electric railroads--Substations)

ZEL'VYANSKIY, Yakov Aronovich; KUSTOV, Valeriy Mikhaylovich;  
SHILKIN, Petr Mikhaylovich; KUCHKO, E.A., red.

[Safety techniques in contact network operation] Tekh-  
nika bezopasnosti pri ekspluatatsii kontaktnoi seti.  
Moskva, Transport, 1965. 191 p. (MIRA 18:12)

RADCHENKO, G.A.; KUSTOV, V.N.; MAYLYBAYEV, E.A.

Aerodynamic characteristics of currents in stope ventilation as  
applied to new ore mining techniques at the Dsheskagan Mine.  
Trudy Inst. gor. dela AN Kazakh. SSR 6:166-182 '60. (MIRA 13:12)  
(Dsheskagan region--Stoping (Mining))  
(Mine ventilation)

POZNYAK, I.Ya.; KUSTOV, V.N.

Studying the mechanism of the slinger type feeder. Trudy MIEHM  
24:111-120 '62. (MIRA 18:3)

KUSTOV, V. V.

✓ 4815. Results of treatment with pentoxyl of leucopenia caused by intensive X-irradiation of patients with syringomyelia and myasthenia. V. V. Kustov *Zh. Nevropatol. i Psikiatr.* 1958, 63, No. 3, 203-204; *Rizvest. Zh. Biol.* 1958, Abstr. No. 51914 — Pentoxyl (I) was used in 6 cases (0.2 g 3 times daily orally for 5 or more days). Under the influence of I a considerable increase occurred in the no. of leucocytes which had previously dropped due to X-ray therapy. The use of I is indicated where uninterrupted use of X-ray therapy is necessary. (Russian)

R. SCHACHNER

KUSTOV, V.V.

Pharmacology of 2,6-dioxypyrimidine (uracil) [with summary in English].  
Farm. 1 toka. 21 no.5:56-59 S-0 '58 (MIRA 11:11)

1. Kafedra farmakologii (nachal'nik - zasluzhennyy deyatel' nauki  
prof. N. V. Lazarev) Voenno-meditsinskoy ordena Lenina akademii  
imani S.M. Kirova.

(URACIL,  
pharmacol. (Rus))

KUSTOV, V.V.

Effect of pentoxyl on the nervous system. Farm.1 toks. 22 no.5:  
387-391 S-0 '59. (MIRA 13:3)

1. Kafedra farmakologii Voenno-meditsinskoy ordena Lenina akademii  
imeni S.M. Kirova (zaveduyushchiy - zasluzhennyy deyatel' nauki prof.  
N.V. Lazarev).

(NERVOUS SYSTEM pharmacol.)  
(URACIL rel.cpts.)



KUSTOV, V.V.; DENISENKO, A.A.; SHEMYAKIN, O.S.

Toxicology of triethylamine. Farm.1 toks. 23 no.2:174-177 Mr-Ap  
'60. (MIRA 14:3)

(ETHYLAMINE—TOXICOLOGY)

KUSTOV, V.V., kand.med.nauk; TIUNOV, L.A., kand.med.nauk (Leningrad)

Analysis of the atmosphere containing various toxic mixtures.  
Gig.i san. 25 no.7:92-93 JI '60. (MIRA 14:5)  
(AIR--POLLUTION)

KUSTOV, V.V.; GOFMAN, I.A.; IVANOVA, F.A.

Endogenous formation of carbon monoxide. Radiobiologiya 1 no.2:  
187-192 '61. (MIRA 14:7)

1. Voenno-meditsinskaya ordena Lenina Akademiya imeni S.M.Kirova,  
Leningrad.

(X RAYS—PHYSIOLOGICAL EFFECT)  
(CARBON MONOXIDE)

KUSTOV, V.V.

Toxicology of sulfuric acid aerosols. Farm.1 toks. 24 no.1:108-109  
Ja-F '61. (MIRA 14:5)

(SULFURIC ACID—TOXICOLOGY)

41724

S/241/62/000/003/002/004

I021/I215

AUTHOR: Kustov, V.V., Leningrad

TITLE: The mechanism of endogenous formation of carbon monoxide in acute serum sickness

PERIODICAL: Meditsinskaya Radiologiya, no. 3, 1962, 28-31

TEXT: This is a continuation of a previous study. It was attempted to prevent the accumulation of CO in blood of rabbits with radiation sickness as well as in vitro experiments on irradiated blood. The addition of 0.1 and 0.001M of triethylene-tetramine (TETA)  $\text{Fe}^{++}$ ,  $10^{-3}$  M/L to X-irradiated blood (5000r) resulted in a decrease in COH, (about one half of the control) CO was practically absent in rabbits irradiated with 850r and injected

Card 1/2

S/241/62/000/003/002/004  
I021/I215

The mechanism of....

intravenously with 0.7 ml/Kg b.w. TETA.  $\text{Fe}^{++}$  (0.5 M) on the 5th, 6th, 7th, 8th and 9th day after irradiation. The author concludes that the endogenous formation of CO in acute radiation sickness is increased due to increased oxidation of hemoglobin by organic peroxides and  $\text{H}_2\text{O}_2$ . There are 3 tables.

SUBMITTED: January 23, 1961

Card 2/2

KUSTOV, V.V.

Effect of a preliminary irradiation with X rays on the resistance  
of animals to carbon monoxide. Farm. 1 toks. 25 no.2:232-237  
Mr-Apr '62. (MIRA 15:6)

(CARBON MONOXIDE—PHYSIOLOGICAL EFFECT)  
(X RAYS—PHYSIOLOGICAL EFFECT)

KUSTOV, V.V.

Effect of carbon monoxide on the course and results of acute  
radiation sickness. Radiobiologiya 3 no.1:53-58 '69.

(MIRA 16:2)

(RADIATION SICKNESS) (CARBON MONOXIDE--PHYSIOLOGICAL EFFECT)



ACCESSION NR: AT4037690

S/2865/64/003/000/0204/0209

AUTHOR: Korotayev, M. M.; Kustov, V.V.; Meleshko, G. I.; Poddubnaya, L. T.; Shepelev, Ye. Ya.

TITLE: Toxic gaseous substances liberated by *Chlorella*

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 3, 1964, 204-209

TOPIC TAGS: algae, respiration, toxicology, photosynthesis, carbon monoxide, closed ecological system, manned space flight, air purification

ABSTRACT: The liberation of toxic gaseous substances in the process of vital photosynthetic activity of *Chlorella pyrenoidosa* S-39 was studied in six experiments lasting 2 to 12 days and in eight experiments lasting 7 to 26 hr. It has been established that during cultivation of *Chlorella* the air of the system accumulates carbon monoxide, nitrogen oxides, hydrocarbons, and, perhaps, methane. Carbon monoxide concentration in different experiments ranged from 0.003 to 0.09 mg/l. In most cases the amounts of carbon monoxide produced exceeded permissible limits. The content of nitrogen oxides in the same system ranged from 0.0006 to

Card 1/2

ACCESSION NR: AT4037690

0.012 mg/l and that of hydrocarbons from 0.0033 to 0.061 mg/l. The production of carbon monoxide in the algae culture is apparently due to the oxidative breakdown of the tetrapyrrol radical of the chlorophyll molecule. To develop systems of purification of regenerated air by biological means, further study of the mechanisms of formation and dynamics of accumulation of toxic substances during prolonged and continuous cultivation of algae in a closed system will be required.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PH, LS

NO REF SOV: 003

OTHER: 008

Card 2/2

L 14272-66 EWT(1)/FS(v)-3 SCTB DD/RD

ACC NR: AT6003837

SOURCE CODE: UR/2865/65/004/000/0027/003G

AUTHOR: Georgiyevskiy, V. S.; Kakurin, L. I.; Kalinina, A. N.; Katkovskiy, B. S.;  
Kustov, V. V.; Mikhaylov, V. I.; Pilipyuk, Z. I.; Tokarev, Yu. N.

ORG: none

TITLE: Effects of eight-hour isolation and hypokinesia on several physiological  
and biochemical indices in man

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy  
biologii, v. 4, 1965, 27-30

TOPIC TAGS: isolation test, hypokinesia, test chamber, respiration, human  
physiology, biochemistry, man, EKG, blood pressure, blood circulation,  
physiologic parameter

ABSTRACT: A study was performed in order to determine the effects of short-term  
isolation and hypokinesia on the basic physiological and biochemical indices  
of man. Ten young men, 21—24 years of age, were kept for 8 hours in a  
sitting position in a hermetically sealed chamber with forced ventilation  
of atmospheric air. The oxygen content was 20—21%, and the CO<sub>2</sub> content  
was 0.01—0.03%. The temperature varied between 20—22° C and the  
relative humidity between 50—60%. The parameters measured included the  
Card 1/3

L 14272-66

ACC NR: AT6003837

standard EKG, pulse frequency, arterial blood pressure, stroke and minute volumes of blood circulation, peripheral resistance, and the cardiac index. In addition, the frequency, depth, and per minute volume of respiration were measured, along with oxygen consumption, the coefficient of oxygen utilization, the amount of oxygen consumed from 1 liter of air, the vital capacity of the lungs, and certain other indices.

After 8 hours of isolation and hypokinesia, the majority of the subjects showed a diminution in pulse frequency (16%), an insignificant increase in stroke volume (11%), a diminution in per minute volume, and an increase in peripheral circulatory resistance (23%). Except for a slight tendency to bradycardia, the EKG did not show any deviations. Although changes in the respiratory functions were varied, they did not exceed limits of normal physiological-variation, except for a tendency toward retardation of forced exhalation of air of about 0.5 sec. After physical exercise, oxygen debt in most of the subjects was cancelled somewhat sooner, while ventilation debt was cancelled more slowly. Energy expenditures required by physical exercise dropped after the experiment at the expense of a diminution in oxygen debt. The number of errors in psychological (intelligence) tests

Card 2/3

L 14272-66

ACC NR: AT6003837

tended to increase toward the end of the experiment, indicating a certain degree of inertia in nervous processes. The amount of carboxyhemoglobin in the blood diminished from  $1.48 \pm 0.48$  to  $0.51 \pm 0.26$  after the experiment and, the catalyzing activity of the blood increased. Both of these changes were statistically significant. The cholinesterase activity of the blood serum diminished by 8.8%. No significant changes were noted in the urea content of the blood. At the same time, the amount of ammonia and urea in urine tended to diminish. In general, 8 hours of isolation and hypokinesia did not lead to any substantial functional shift in the human organism. Orig. art. has: 3 tables. [ATD PRESS: 4091-F]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 002

Card 3/3

L 14266-66 EWT(1)/F3(v)-3 SCTB DD/RD

ACC NR: AT6003842

SOURCE CODE: UR/2865/65/004/000/0075/0079

AUTHOR: Kustov, V. V.; Mikhaylov, V. I.; Pilipyuk, Z. I.; Tokarev, Yu. N.;  
Georgiyevskiy, V. S.; Katkovskiy, B. S.; Kalinina, A. N.

43  
B+

ORG: none

TITLE: Changes in several <sup>2, 5, 5, 41</sup>physiological and biochemical indices in man after exposure to small concentrations of carbon monoxide

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 75-79

TOPIC TAGS: carbon monoxide, respiration, human physiology, test chamber, man, biochemistry, blood, central nervous system

ABSTRACT: Experiments were performed on young adult men in order to test the effects of carbon monoxide on certain biochemical indices. Each subject participated in an eight-hr background experiment (effect of hermetization) and an eight-hr experiment on the effects of carbon monoxide. A carbon monoxide concentration corresponds to the concentration of carbon monoxide exhaled by humans. The CO<sub>2</sub> concentration in the chamber did not exceed 0.6%, the air temperature was 18—22° C, the relative humid-

Card 1/3

2

L 14266-66

ACC NR: AT6003842

ity was 50—60%. The catalyzing activity of the blood, the activity of cholinesterase in blood serum, and the carboxyhemoglobin content of blood were measured in all subjects before and after the experiment. In addition standard EKG, blood pressure, oxygen consumption, and oxygen utilization were also measured. The subjects were also given mathematical problems to solve.

After an exposure of six to seven hours, the subjects manifested certain functional shifts in the cardiovascular system and external respiration, and also an increase in errors in test performance. The P, R, and T points of the EKG showed a drop in voltage. The QRS complex tended to expand (sometimes accompanied by an increased heart rate). The number of errors in all arithmetic tests showed a substantial increase.

After an eight-hr exposure to carbon monoxide, the carboxyhemoglobin content of the blood increased from  $0.66 \pm 0.056\%$  to  $1.58 \pm 0.43\%$ . This was accompanied by a statistically significant increase in the cholinesterase activity of the blood serum. The catalyzing activity of the blood did not change.

Card 2/3

L 14266-66

ACC NR: AT6003842

An analysis of the data obtained makes it possible to assume that the minute physiological shifts observed in man after exposure to carbon monoxide cannot be explained as simply the result of carbon monoxide hypoxemia, since the carboxyhemoglobin content of the blood did not exceed 1.58%. It is felt that these changes are due to the effect of carbon monoxide on tissues and that this tissue effect must be taken into account in setting standards of permissible concentration of carbon monoxide in the air of hermetically sealed chambers. Orig. art. has: 3 tables. [ATD PRESS: 4091-P]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 004

Card 3/3



L 16675-66 EWT(1) SCTB DD  
 ACC NR: AP6007745 SOURCE CODE: UR/0293/00/004/00 144/0150  
 AUTHOR: Tlunov, L. A.; Kustov, V. V. 46  
 ORG: rone 2  
 TITLE: Endogenous formation of carbon monoxide and its role in a closed ecological system  
 SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 1, 1966, 144-150  
 TOPIC TAGS: carbon monoxide, closed ecology system, life support system, biochemistry, plant chemistry, radiation biologic effect, plant biologic effect, tissue physiology  
 ABSTRACT: Problems of the endogenous formation of carbon monoxide are reviewed and the importance of this phenomenon in closed ecological systems is stressed in a recent Soviet survey article. The review includes the following headings: Endogenous formation of carbon monoxide in mammals; Mechanism of endogenous carbon monoxide formation; Endogenous formation of carbon monoxide under the effect of ionizing radiation; and Formation of carbon monoxide in plants. It is stated that the simultaneous processes of endogenous CO formation, CO oxidation, and CO fixation take place in animal and plant tissues. These competing processes result in a certain equilibrium. This fact should be taken into account in developing life-support systems for spaceships. Orig. art. has: 1 figure. [ATD PRESS: 4198-F]  
 SUB CODE: 06 / SUBM DATE: 16Feb65 / ORIG REF: 012 / OTH REF: 055  
 Card 1/1 m.c. UDC: 629.198.6:615.9

L 1269-66 ENT(1)/ENP(e)/ENT(m)/ENP(1)/T/ENP(t)/ENP(b)/ENA(c) 1JP(c) JD/GG/KH

ACCESSION NR: AP5024567

UR/0070/65/010/005/0760/0761

548.4

AUTHOR: Medvedev, S. A.; Kustov, Ye. F.; Arsen'yev, P. A. 44.5 57 48 B

TITLE: Study of dislocations in synthetic corundum single crystals 44.5 6

SOURCE: Kristallografiya, v. 10, no. 5, 1965, 760-761

TOPIC TAGS: corundum, crystal dislocation, single crystal

ABSTRACT: Etching was used to study the dislocation density distribution in the basal plane of synthetic corundum grown by the Verneuil process. Fe, Ti, Mn, and Co were introduced separately in concentrations up to 0.5%; in addition, Fe and Cr, Co and Cr, and Ti and Cr were introduced together (total impurities up to 0.8%). Samples for the experiments were cut out of the central portion of the single crystal. The dislocations were counted along and across the sample every 0.5 mm with an MEM-8 microscope. Fig. 1 of the Enclosure shows a typical dislocation density distribution for a crystal having a 90° angle between the optic and the geometrical axis; the length and width of the sample are plotted along the y and x axes, respectively, and the dislocation density is plotted along the z axis. In crystals having a 60° angle between the geometrical and the optic axes, the average dislocation densities are one order of magnitude greater. The Card 1/3

L 4269-66

ACCESSION NR: AP5024567

maximum dislocation density in such crystals reaches  $1.2 \times 10^6 \text{ cm}^{-2}$ , and the minimum is  $1.3 \times 10^5 \text{ cm}^{-2}$ . "The authors thank L. S. Milevskiy for discussing the results and M. M. Yukhvits for participating in the measurements." 44, 55 Orig. art. has: 1 figure. 9

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute) 44, 55

SUBMITTED: 03Dec64

ENCL: 01

SUB CODE: MT, SS

NO REF SOV: 000

OTHER: 003

Card 2/3

L 4269-66

ACCESSION NR: AP5024567

ENCLOSURE: 01

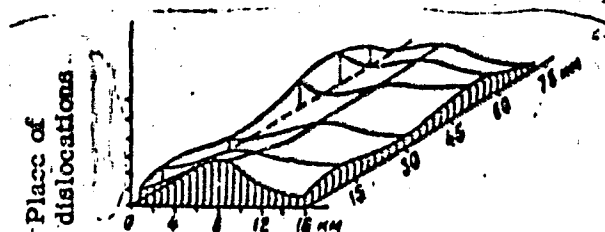


Figure 1. Three-dimensional graph of variations in dislocation density in a crystal having the geometrical axis perpendicular to the optic axis.

Card 3/3

BP

L 15959-46 EWT(1)/EWP(e)/EWT(m)/ETC(f)/EWG(m)/EPP(n)-2/T/EWP(t) LJP(c)  
 ACC NR: AP6001589 JD/JG/GJ/AT/WH SOURCE CODE: UR/0120/65/000/006/0186/0188

AUTHOR: Medvedev, S. A ; Kustov, Ye. F.; Arsen'yev, P. A.

ORG: Moscow Power Institute (Moskovskiy energeticheskiy institut)

TITLE: The use of high frequency discharge plasma for the growing of single crystals

SOURCE: Priory i tekhnika eksperimenta, no. 6, 1965, 186-188

TOPIC TAGS: single crystal growing, Verneuil method, plasma heating, plasma jet

ABSTRACT: Recent published literature describes the use of electrodeless gaseous discharge for the growing of single crystals of high-melting oxides. The present paper describes a high frequency generator and a plasma burner for the growing of crystals according to the Verneuil method. The oxygen-hydrogen jet is replaced by a plasma jet heating the gas to 7,000-10,000K. The device can operate within any desired atmospheric surrounding and the absence of electrodes secures a high degree of purity of the product. The added temperature range (as compared with the classic Verneuil method) allows the growing of crystals with a high degree of efficiency. The device was used for synthetic corundum single crystal production of high purity. Orig. art. has: 4 figures.

Card 1/2 UDC: 669-172-9

L 15959-46

ACC NR: AP6001589

SUB CODE: 20 / SUM DATE: 26Sep64 / ORIG REF: 003 / OTH REF: 003

bvk

Card 2/2

22(1)

SSV/47-59-2-24/31

AUTHOR: Kustov, Yu.A.

TITLE: Excursion to an Automatic Telephone Exchange (Ekskursiya na avtomaticheskuyu telefonnyu stantsiyu)

PERIODICAL: Fizika v shkole, 1959, Nr 2, pp 82-85 (USSR)

ABSTRACT: The author describes in detail an excursion to an automatic telephone exchange to familiarize the students with the installation and its operation. When explaining the installation a set of simplified devices quoted in Professor Ye.V. Kitayev's article (Ref. 2) was shown to the students by means of a projector. He lists the points to which the students paid special attention. The names of the following Soviet inventors are listed as creators of an automatic telephone exchange step-by-step system: B.K. Martynov, K.I. Volkov, V.A. Lebedskiy, N.K. Rozental', G.S. Savel'yev, M.N. Stoyanov, L.S. Farafonov and S.V. Shevchenko. The students' principal attention was drawn to the automatic in-

Card 1/2

Excursion to an Automatic Telephone Exchange

567/47-59-2-24/31

stallation. They also were shown the protection of automats against foreign currents, and the optical and acoustical signalling, indicating the spot and character of damage. There are 3 photographs and 2 Soviet references.

ASSOCIATION: 2-ya srednyaya shkola, Stavropol'-na-Volge (Secondary School Nr 2, Stavropol'-na-Volge)

Card 2/2



KUSTOVA, A., kandidat fiziko-matematicheskikh nauk.

Story about vacuum. Znan.sila 32 no.8:9-13 Ag '57. (MIRA 10:10)  
(Vacuum)

KUSTOVA, A. I. --

"The Biology and Ecology of Fusariosis and Sclerotinia of the Monokaloid Field: Lupine and the Development of Protective measures Against Them." Cand Agr Sc, Inst of Specialized Agriculture, Acad Sci Belorussian SSR, Minsk, 1 p. (RZhBiol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

Kustova, A. I.

The influence of microelements on yield of potatoes and their resistance to disease. N. A. Dornshkin and A. I. Kustova. *Zemledelie* 3, No. 6, 60-70 (1955).—Two Experiments. 40 kg.  $MgSO_4$ , 6 kg.  $CuSO_4$ , 20 kg.  $KMnO_4$ , and 2 kg. B-Mg fertilizer were added before planting. The tops were sprayed during the growing season with solns. of B 0.02, Mg 0.3, Cu 0.02, Mn 0.01, and B-Mg fertilizer 0.01%.  $CuSO_4$  seems to speed up the sprouting by 6 days and the B-Mg fertilizer by 4 days. Flowering was also advanced by 6-8 days. The microelements applied in the form of a spray have retarded the appearance of rhizoctonia, phytophthora by 0-13 days. The degree of infection was also reduced, especially by the  $CuSO_4$  and  $KMnO_4$ . Yields and starch content have also been increased. J. S. Joffe

①

Kustava, A. I.

Effect of nutrient fertilizing with microelements on the disease resistance and yield of potatoes. N. A. Dezhnevskii and A. I. Kustava. *Izv. Akad. Nauk Beloruss. S.S.R.* 1955, No. 1, 15-16 (in Russian); cf. *C.A.* 49, 1432a. In a 2-year expt. potatoes were cultivated in a normally fertilized (org. manure and full NPK) potbed soil with the addition of the following microelements:  $\text{H}_2\text{BO}_3$ , 2;  $\text{MgSO}_4$ , 10;  $\text{CuSO}_4$ , 6;  $\text{KMnO}_4$ , 20, and a M. B fertilizer 2 kg./ha.; from the same microelements the spraying solns. of the concns. of 0.02, 0.3, 0.02, 0.01, and 0.1% (v/v), have been prepared and used for spraying the potato plants during the vegetative growth (just after sprouting, and before full closing of the leaves). In all instances the plant treatment with the microelement sprays, or by applying the microelements around the roots, the root nutrition increased the potato yield and the tuber resistance against *Hypochytrium solani*, *Phytophthora infestans*, and *Phytophthora*. Cu and Mn showed the greatest effects. The amt. of starch in the tubers increased approx. by 2% (from 11.0-13.5 to 14.4-15.8%) by the applications of the Cu and Mn supplements; in this respect Mg was nearly without any effect while B decreased the starch content of the tubers (to 11.4-12.8%). All microelements increased the vegetative growth and development of the plants; postponed (by 5-11 days) the appearance of the leaf sicknesses; accelerated the time of the plant budding and flowering; increased the tuber qualities for the vegetative reproduction; and increased the storage life of the tubers. These effects of the microelements increased further when the treatments were repeated in the 2nd year by using the exptl. tubers from the previous year as the seed material.

E. Wierbicki

2

[illegible]

DOROZHNIKIN, N.I.; KUSTOVA, A.I.

Experiments with and observations of sclerotinins in White Russia.  
 Dokl. zap. BGU no. 26:122-135 '56. (MIRA 1959)  
 (White Russia--Fungi, Phytopathogenic) (Lupine--Diseases and pests)

KALITVA, A.I.; LOSINSKAYA, N.I.

Injurious fungal and insect fauna of the "Nesvizh" Sanatorium  
Park. Sbor. nauch. rab. TILS no.1:122-125 '60.

(MIRA 14:10)

(Nesvizh District--Trees--Diseases and pests)

KUSTOVA, A.I.; LOSINSKAYA, N.L.

Injurious fungi and insects of the Botanical Garden of the Academy  
of Sciences of the White Russian S.S.R. Sbor. bot. rab. Bel. otd.  
VBO no.2:205-210 '60. (MIRA 15:1)

(White Russia--Fungi, Phytopathogenic)

(White Russia--Insects, Injurious and beneficial)

KUSTOV, A. KH.

Vernalization of cottonseed and the quality of enzymes. A. K. Kustov and A. Kh. Kustov. *Izv. Akad. Nauk Turkmen. S.S.R. 1953, No. 6049. Referat Zhur. Khim. 1953, No. 6049.*—The changes in the quality and quantity of catalase, invertase, and protease were studied in vernalized cottonseed. Emergence from dormancy and passing through a vernalization stage cause an increase in the enzymes. Most intensely invertase forms, somewhat less intensely catalase, while protease forms very weakly. The quality of enzymes upon emergence from dormancy first increases and toward the end of vernalization decreases. Since the illuminated stage of cotton development takes place at higher temp. of the surrounding medium than the vernalization stage it is considered that under these conditions acceleration of the chem. processes can be achieved with low-grade enzymes, whereas high-grade enzymes would rather retard the chem. process. Therefore, the lowering of the quality of enzymes of cotton toward the end of vernalization readies the plant to temps. of the surrounding. M. Ito sh.



KUSTOVA, A.Kh.

Effect of trace elements on the yield of cotton. Izv. AN Turk.S.S.R.  
no.3:51-57 '57. (MIRA 10:10)

1. Institut botaniki Akademii nauk Turkmenskoy SSR.  
(Cotton) (Trace elements)

KUSHOVA, A. I.

Editor of the newspaper "Komsomolskaya Pravda" in the city of Khabarovsk. In the AM. The newspaper is published daily except on Sundays and public holidays.

1. Institute for the AM. The newspaper is published daily except on Sundays and public holidays.

KUSTOVA, A.Kh.

Role of zink in vital processes of the cotton plant. Izv. AN Turk.  
SSR. Ser. biol. nauk no.2:13-20 '61. (MIRA 14:7)

1. Institut botaniki AN Turkmeneskoy SSR.  
(COTTON GROWING) (PLANTS, EFFECT OF ZINC ON)

KUSTOVA, A. Kh.

Some data on the effect of microe agents on the increase in salt  
resistance of cotton. Izv. AN Turk. SSR. Ser. biol. nauk no.6:3-8  
'64. (MIRA 18:4)

1. Institut botaniki AN Turkmenskoy SSR.

KUSTOVA, A.Kh.

Effect of microelements on some physiological and biochemical processes in cotton as related to soil salinity. Izv. AN Turk. SSR. Ser.biol.nauk no.5:3-10 '65.

(MIRA 18:11)

1. Institut botaniki AN Turkmeneskoy SSR.

KUSTOVA, A. V.

KUSTOVA, A. V. - "Investigation of a High-Voltage Impulse Discharge Under High Pressure (Formation of an Electron Beam and Its Control in an Impulse System)." Sub 10 Dec 52, Moscow Order of Lenin State U imeni M. V. Lomonosov. (Dissertation for the Degree of Candidate in Physicomathematical Sciences).

SO: Vechernaya Moskva January-December 1952

*Kustova, A. V.*  
USSR/Physics - Electric discharge

FD-893

Card 1/1      Pub 153-2/26

Author      : Reyhrudel', E. M., Kustova, A. V., and Zimelev, A. G.

Title      : Elementary processes during formation of a high-voltage impulse  
discharge at low pressures

Periodical   : Zhur. tekhn. fiz. 24, 1179-1186, Jul 1954

Abstract    : Impulse discharges at 50 to 110 kV and pressures of  $10^{-4}$  to  $10^{-1}$  mm Hg were studied on the oscillograph in helium, argon, air and Hg vapor. The gap between electrodes was varied from 5 to 17 cm. An essentially inhomogeneous density of positive space charge with a maximum near the cathode was observed in the discharge phase. The main role in the discharge formation at high current density in first and second phases is played by compensation of the negative space charge by positive ions along the whole discharge gap. Five references including 3 foreign.

Institution   : --

Submitted    : March 19, 1954

~~KUSTOVA, A.V.~~; REYKHUDELI', E.M.

Gas focusing beams as a transition stage in the formation of  
high-voltage impulsive discharges at low temperatures. Zhur.  
tekh.fiz. 24 no.12:2183-2189 D '54. (MIRA 8:2)  
(Electric discharges through gases)



LAPP, R.E.; ANDREWS, N.L.; ASTAKHOV, K.V., professor, redaktor; KUDRYAVTSEV, B.B., professor, redaktor; KUSTOVA, A.V., kandidat fiziko-matematicheskikh nauk, redaktor.

[Nuclear radiation physics. Translated from the English] Fizika iadernogo izlucheniia. Perevod s angliiskogo. Pod red. K.V. Astakhova, B.B. Kudriavtseva i A.V. Kustovoi. Moskva, Voen. izd-vo Ministerstva obor. SSSR, 1956.  
435 p. (MLRA 9:4)

(Nuclear physics) (Radiation)

REYKHRODEL', E.N., ZIMELEV, A.G., KUSTOVA, A.V.

Properties of cold cathodes with pulsed-discharge trigger devices  
operated at low pressures. Izv.AN SSSR, Ser.fiz. 20 no.10:1153-  
1161 O '56. (MLRA 10:1)

1. Fizicheskii fakul'tet Moskovskogo gosudarstvennogo universiteta  
imeni M.V.Lomonosova.

(Electron tubes)

KUSTOVA, A. V.

"Investigation of Phenomena Accompanying the Propagation of Ultrasound and Methods to be used in Work in this Field: The Behavior of Cavitation Bubbles."

report presented at the 6th Sci. Conference on the Application of Ultrasound  
in the investigation of Matter, 3-7 Feb 1958, organized by Min. of Education  
RSFSR and Moscow Oblast Pedagogic Inst. im N. K. Krupskaya.

KUSTOVA, A.V.

Effect of calcium and potassium on the nervous mechanisms of  
transplanted cancer in animals. Uch. zap. Ped. inst. Gerts.  
179:235-250 '58. MIRA 16:5)

(CANCER) (NERVOUS SYSTEM) (POTASSIUM IN THE BODY)  
(CALCIUM IN THE BODY)